

What is claim d is:

1. An analyzing apparatus comprising:

a recovery unit for recovering a gas containing fine particles;

5. a collection unit for collecting said fine particles from the gas recovered by said recovery unit; and

an analysis unit to which components of said fine particles collected by said collection unit and vaporized are introduced, wherein

10 said recovery unit has a cover, a nozzle for spraying a fluid to a target region to be examined which has said fine particles adhered thereto and is located inside said cover, and a recovery flow path for recovering the fluid sprayed to said target region and guiding the recovered fluid to said 15 collection unit.

2. An analyzing apparatus comprising:

a recovery unit for recovering a gas containing fine particles;

20 a collection unit for collecting said fine particles from the gas recovered by said recovery unit; and

an analysis unit to which components of said fine particles collected by said collection unit and vaporized are introduced, wherein

25 said collection unit has an ejector for ejecting the gas from said recovery unit, a fine particle collector disposed

in opposing relation to said ejector to cause a collision between said fine particles in said gas, an exhaust flow path in which the gas that has passed through said fine particle collector flows, a vaporizer for vaporizing said fine particles collected by said fine particle collector, and an extraction flow path for guiding said vaporized components of said fine particle to said analysis unit.

3. The analyzing apparatus according to claim 2, wherein said collection unit has each of said vaporizer for the collected fine particles and said extraction flow path disposed on a surface of said fine particle collector opposite to a surface thereof formed with said ejector.

4. The analyzing apparatus according to claim 2, further comprising a carry-in mechanism for carrying in said fine particle collector having said collected fine particles from said collection unit and said vaporizer is formed to vaporize said fine particles of said fine particle collector that has been carried in.

5. An analyzing apparatus comprising:  
20 a recovery unit for recovering a gas containing fine particles;

a collection unit for collecting said fine particles from the gas recovered by said recovery unit;

an exhaust flow path in which the gas that has passed  
25 through said collection unit flows and a suction pump is

disposed; and

an analysis unit to which components of said fine particles collected by said collection unit and vaporized are introduced, wherein

5       said collection unit has an ejector for ejecting the gas from said recovery unit, a fine particle collector disposed in opposing relation to said ejector to cause a collision between said fine particles in said gas, a vaporizer for vaporizing said fine particles collected by said fine particle collector, 10 and an extraction flow path for guiding said components of said vaporized fine particles to said analysis unit, said analyzing apparatus having

a first operation of operating said suction pump to exhaust the gas toward said exhaust flow path and collecting said fine 15 particles in said fine particle collector and a second operation of lowering said suction pump after said collection to suppress the exhaust of the gas toward the exhaust flow path and increasing a temperature of said fine particle collector to a level higher than during said first operation to vaporize said fine particles.

20       6. A fine particle collecting apparatus comprising:

a recovery unit for recovering a gas containing fine particles; and

a connection unit to a collection unit for collecting said fine particles from the gas recovered by said recovery 25 unit, wherein

- said recovery unit has a cover, a nozzle for spraying a fluid to a target region having said fine particles adhered thereto and located inside said cover, and a recovery flow path for recovering the fluid sprayed to said target region and
- 5           the fluid is ejected from said nozzle in a direction in which the ejected fluid approaches said recovery flow path.
7. A fine particle collecting apparatus comprising:  
a recovery unit for recovering a gas containing fine particles; and
- 10          a collection unit for collecting said fine particles from the gas recovered by said recovery unit, wherein  
              said collection unit has an ejector for ejecting the gas from said recovery unit, a fine particle collector disposed in opposing relation to said ejector to cause a collision between  
15          said fine particles in said gas, an exhaust flow path in which the gas that has passed through said fine particle collector flows, a vaporizer for vaporizing said fine particles collected by said fine particle collector, and an extraction flow path in which said components of said vaporized fine particles flow.
- 20          8. The fine particle collecting apparatus according to claim 6, wherein said collection unit has each of said vaporizer for the collected fine particles and said extraction flow path disposed on a surface of said fine particle collector opposite to a side surface thereof formed with said ejector.
- 25          9. A fine particle collecting apparatus comprising:

a recovery unit for recovering a gas containing fine particles; and

a collection unit for collecting said fine particles from the gas recovered by said recovery unit, wherein

5       said collection unit has an ejector for ejecting the gas that has passed through said recovery unit, a fine particle collector disposed in opposing relation to said ejector to cause a collision between said fine particles in said gas, an exhaust flow path in which the gas that has passed through said fine  
10      particle collector flows, a carry-in mechanism for carrying in said fine particle collector having said collected fine particles from said collection unit, a vaporizer for vaporizing said fine particles of said fine particle collector that has been carried in, and an extraction flow path in which said  
15      components of said vaporized fine particles flow.

10. The fine particle collecting apparatus according to claim 8, wherein said fine particle collector includes a plurality of fine particle collectors, said fine particle collecting apparatus further comprising:

20      a support member on which said plurality of fine particle collectors are disposed, wherein

25      a first one of said plurality of fine particle collectors is disposed at a position closer to said vaporizer and a second one of said plurality of fine particle collectors is disposed at a position closer to said collection unit.

11. A fine particle collecting apparatus comprising:  
a recovery unit for recovering a gas containing fine  
particles; and  
a collection unit for collecting said fine particles from  
5 the gas recovered by said recovery unit, wherein  
said collection unit has an ejector for ejecting the gas  
that has passed through said recovery unit, a fine particle  
collector disposed in opposing relation to said ejector to cause  
a collision between said fine particles in said gas, an exhaust  
10 flow path in which the gas that has passed through said fine  
particle collector flows and which is connecting to a suction  
pump, a vaporizer for vaporizing said fine particles collected  
by said fine particle collector, and an extraction flow path  
in which said components of said vaporized fine particles flow,  
15 said fine particle collecting apparatus having  
a first operation of operating said suction pump to exhaust  
the gas toward said exhaust flow path and collecting said fine  
particles in said fine particle collector and a second operation  
of lowering said suction pump after said collection to suppress  
20 the exhaust of the gas toward the exhaust flow path and increasing  
a temperature of said fine particle collector to a level higher  
than during said first operation to vaporize said fine particles.